



# UNITED STATES PATENT AND TRADEMARK OFFICE

87.  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,813	08/25/2003	Erkki Ruoslahti	066821-0233	5267

41552 7590 06/28/2005

MCDERMOTT, WILL & EMERY  
4370 LA JOLLA VILLAGE DRIVE, SUITE 700  
SAN DIEGO, CA 92122

EXAMINER

YAO, LEI

ART UNIT	PAPER NUMBER
----------	--------------

1642

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/648,813

Applicant(s)

RUOSLAHTI ET AL.

Examiner

Lei Yao, Ph.D.

Art Unit

1642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-98 is/are pending in the application.
- 4a) Of the above claim(s) 18-20, 22-25 and 34-98 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 21 and 26-33 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/28/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: exhibit A and B.

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election with traverse of Group I with species of polypeptide in the reply filed on 5/9/05 is acknowledged.

Applicant's request for clarification of claims 78-98 in the restriction is also acknowledged. The office apologizes for the oversight. The restriction of the inventions is corrected as following:

- I. Claims 1-33, drawn to isolated peptides, peptidomimetic comprising SEQ ID No: 1 and a conjugate comprising a therapeutic agent linked to a homing molecule that selectively homes to tumor and binding to collage classified in class 530, subclass 300 and 350 and class 530, subclass 2.
- II. Claims 34-77, drawn to a method of directing a moiety to tumor vasculature and a method of imaging tumor vasculature and reducing the number of tumor vessels in a subject comprising administering to the subject a conjugate liked to a homing molecule that selectively homes to tumor vasculature and binds to collagen, classified in class 424, subclass 9.1, 1.11, and 9.8.
- III. Claims 78-98, drawn to a method of treating cancer in a subject, comprising administering to subject a conjugate that selectively homes to tumor vasculature and selectively bind to collagen.

Applicants argue that a search of the claims of either group (I or II) will likely reveal art relevant to the examination of the claims of the other group and division of the claims into these groups would result in duplicative searches, examination of the claims of Group I with the claims of Group II together should not be an undue burden on the examiner.

These have been considered, but not found persuasive. Invention of group I is drawn to an product of isolated peptide, peptidomimetic, and a conjugate, while invention of group II is drawn to a method of using the product comprising administering to the subject a conjugate. Inventions group I and group II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with

Art Unit: 1642

another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the polypeptide or conjugate of Group I can be used to immunize an animal to produce an antibody, as opposed to being used for administering a subject for imaging tumor vasculature and reducing the number of tumor vessels. Searching the inventions of groups I and II together would impose serious search burden. The inventions of Groups I and II have a separate status in the art as shown by their different classifications. The search for the polypeptide or conjugate and a method of using the conjugate are not coextensive. Prior art, which teaches the polypeptide or the conjugate, would not necessarily be applicable to the method of using them in vivo for administration to a subject. For this reason, the restriction requirement is deemed to be proper and is adhered to. The requirement is therefore made **FINAL**.

Claims 1-98 are pending. Claims 18-20, 22-25 and 34-98 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions or species, there being no allowable generic or linking claim. Claims 1-17, 21 and 26-33 are examined on the merits.

### **Claim Rejections - 35 USC § 112**

#### **The following is a quotation of the second paragraph of 35 U.S.C. 112:**

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-17, 21, 26-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-17, 21, 26-33 are indefinite because the term "a peptidomimetic thereof" in claim 1 and 5 is not clear. The specification on page 4, line 5-14, states that a peptidomimetic has a length of at most 50 amino acid that include the amino acid sequence CREKA (SEQ ID NO: 1) or conservative variant or peptidomimetic thereof, whereas, the specification on page 5, line 10-14, states that the

Art Unit: 1642

peptidomimetic contains sequence CREKA or conservative variant or peptidomimetic thereof that selectively homes to tumor vasculature and binds collagen. It cannot be determined whether this peptidomimetic refers to a similar structure to SEQ ID NO: 1 or possesses the function of homing to tumor vasculature and binds collagen.

**The following is a quotation of the first paragraph of 35 U.S.C. 112:**

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-16, 21, and 26-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the instant case, the claims encompass a genus of a peptidomimetics or a homing molecule, which binds to collagen. However, the written description in this case only sets forth a single polypeptide, CREKA, (SEQ ID NO:1). The claims would encompass significant structural dissimilarity and diversity as compared to the CREKA (SEQ ID NO: 1).

The claims encompass an isolated peptide, peptidomimetic thereof comprising CREKA (SEQ ID NO:1), conservative variant, or peptidomimetic thereof having length of less than 20 amino acid residues. The claims would encompass a homing molecule comprising a peptidomimetic thereof having a length of at most 200 residues, which selectively homes to tumor vasculature and selectively binds to collagen. However, the written description (specification, page 73-75) only reasonably conveys one species of homing molecule, a peptide having a sequence CREKA (SEQ ID NO: 1), in association with collagen binding. A description of a genus may be achieved by means of a recitation of a representative number of species falling within the scope of the genus or by describing structural features common the genus that "constitute a substantial portion of the genus." See University of California v. Eli Lilly and Co., 119 F.3d 1559, 1568, 43 USPQ2d 1398, 1406 (Fed. Cir. 1997): "A description of a genus of cDNAs may be

Art Unit: 1642

achieved by means of a recitation of a representative number of cDNA, defined by nucleotide sequence, falling within the scope of the genus or of a recitation of structural features common to the members of the genus, which features constitute a substantial portion of the genus."

The court has since clarified that this standard applies to compounds other than cDNAs. See University of Rochester v. G.D. Searle & Co., Inc., \_\_\_ F.3d \_\_\_, 2004 WL 260813, at \*9 (Fed.Cir.Feb. 13, 2004). The instant specification fails to provide sufficient descriptive information, such as definitive structural or functional features that are common to the genus. That is, the instant specification fails to provide a representative number of homing molecules homing to collagen or peptidomimetics thereof, that encompass the broad genus of homing molecules or peptidomimetic thereof having a common structural features to the polypeptide, CREKA (SEQ ID NO: 1), which would home to tumor vascular and bind to collagen. Since the disclosure fails to describe the common attributes or characteristics that identify members of the genus, and because the genus is highly variant, the disclosure of one species CREKA (SEQ ID NO: 1) is insufficient to describe the genus. Thus, one of skill in the art would reasonably conclude that the disclosure fails to provide a representative number of species to describe and enable the genus as broadly claimed.

Vas-Cath Inc. v. Mahurkar, 19USPQ2d 1111, clearly states "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the 'written description' inquiry, whatever is now claimed." (See page 1117.) The specification does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." (See Vas-Cath at page 1116). As discussed above, the skilled artisan cannot envision the detailed chemical structure(s) of the encompassed genus of homing molecule or peptidomimetic thereof that bind to collagen and therefore conception is not achieved until reduction to practice has occurred, regardless of the complexity or simplicity of the method of isolation. Adequate written description requires more than a mere statement that it is part of the invention and reference to a potential method of isolating it. The compound itself is required. See Fiers v. Revel, 25 USPQ2d 1601 at 1606 (CAFC 1993) and Amgen Inc. v. Chugai Pharmaceutical Co. Ltd., 18 USPQ2d 1016.

Art Unit: 1642

One cannot describe what one has not conceived. See *Fiddes v. Baird*, 30 USPQ2d 1481 at 1483. In *Fiddes*, claims directed to mammalian FGF's were found to be unpatentable due to lack of written description for that broad class. The specification provided only the bovine sequence. Therefore, only an CREKA (SEQ ID NO:1), but not the full breadth of the claims, meets the written description provision of 35 U.S.C. §112, first paragraph. Applicant is reminded that Vas-Cath makes clear that the written description provision of 35 U.S.C. §112 is severable from its enablement provision (see page 1115).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Samal et al., (US Patent, 5874399).

Claim 1 is drawn to an isolated peptide or peptidomimetic, comprising the amino acid sequence CREKA (SEQ ID NO: 1) or a peptidomimetic thereof having a length of less than 100 amino acid residues. Claims 2-4 are further drawn to claim 1, wherein the isolated peptide or peptidomimetic is a peptide and has a length of less than 20 residues.

Samal et al., disclose a peptide of 16 amino acid residues, which contains amino acid sequence CREK, which has a similar structure as CREKA and is peptidomimetic of CREKA (see SEQ ID NO: 12, sections 27-28 and sequence search, exhibit A).

Due to the indefiniteness of the term "peptidomimetic as stated earlier, the Office, for the art purpose, reasonably interprets that "peptidomimetic" has a similar structure as CREKA (see 112 2<sup>nd</sup> rejection above).

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 are also rejected under 35 U.S.C. 102(e) as being anticipated by Ruoslahti et al., (US Patent 6491894) and evidenced by Inazawa et al., (US Patent application publication, 2005/0037345 A1).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claims 1-4 are described previously.

Ruoslahti et al., disclose that a peptide of 9 amino acid residues, which contains amino acid sequence CREKS (SEQ ID NO: 197, section 52, table 3) as evidenced by exhibit B. Ruoslahti et al., further disclose that the peptide is identified as a tumor homing peptides, which is recovered from human Kaposi's sarcoma in mice by in vivo panning (section 52, line 39-45). The peptide in phage administered to the mice bearing human Kaposi's sarcoma is homed to the tumor and recovered from the tumor tissue. The peptide CREKS disclosed by Ruoslahti et al., is a conservative variant of peptide CREKA as evidenced by Inazawa et al., (US Patent application publication, 2005/0037345 A1, page 5, table), which states that amino acid Serine (S) is conservative substitution of amino acid residue of Alanine (A).

### ***Claim Objections***

Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



Art Unit: 1642

**Summary**

Claims 5-16, 18-21, and 26-33 are free of the art, but rejected under 112 first and second paragraphs. There is no prior art that teach a conjugate of therapeutic agent linked to a homing molecule that selectively homes to vasculature and also binding to collagen.

**Conclusion**

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lei Yao, Ph.D. whose telephone number is 571-272-3112. The examiner can normally be reached on 8am-4.30pm Monday to Friday.


Any inquiry of a general nature, matching or file papers or relating to the status of this application or proceeding should be directed to Kim Downing for Art Unit 1642 whose telephone number is 571-272-0521

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Siew can be reached on 571-272-0787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lei Yao, Ph.D.  
Examiner  
Art Unit 1642

LY

  
JEFFREY SIEW  
SUPERVISORY PATENT EXAMINER  
6/22/05

Sequence 12, Application US/08294770A  
Patent No. 5580754  
GENERAL INFORMATION:  
APPLICANT: Badru, Samal B.  
TITLE OF INVENTION: Progenitor B Cell Stimulating Factor  
NUMBER OF SEQUENCES: 12  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Amgen Inc.  
STREET: 1840 Denavilland Drive  
CITY: Thousand Oaks  
STATE: California  
COUNTRY: USA  
ZIP: 91320-1789  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/294,770A  
FILING DATE:  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Winter, Robert B.  
REFERENCE/DOCKET NUMBER: A-214  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 16 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-294-770A-12

Query Match  
Best Local Similarity 80.0%; Score 4; DB 1; Length 16;  
Pred. No. 97;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CREK 4  
Db 1 CREK 4

RESULT 14  
US-08-448-735C-12  
Sequence 12, Application US/08448735C  
Patent No. 5874399  
GENERAL INFORMATION:  
APPLICANT: Badru, Samal B.  
TITLE OF INVENTION: Progenitor B Cell Stimulating Factor  
NUMBER OF SEQUENCES: 12  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Amgen Inc.  
STREET: 1840 Denavilland Drive  
CITY: Thousand Oaks  
STATE: California  
COUNTRY: USA  
ZIP: 91320-1789  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/448,735C  
FILING DATE:  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Winter, Robert B.  
REFERENCE/DOCKET NUMBER: A-214B  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 16 amino acids

↓

TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-448-735C-12

Query Match  
Best Local Similarity 80.0%; Score 4; DB 2; Length 16;  
Pred. No. 97;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CREK 4  
Db 1 CREK 4

RESULT 15  
US-09-929-922-39  
Sequence 39, Application US/09929922  
Patent No. 6723697  
GENERAL INFORMATION:  
APPLICANT: Center, David M.  
APPLICANT: Cruickshank, William W.  
APPLICANT: Kornfeld, Hardy  
TITLE OF INVENTION: IL-16 ANTAGONISTS  
FILE REFERENCE: Research Corporation Tech., Inc.  
CURRENT APPLICATION NUMBER: US/09/929,922  
PRIOR FILING DATE: 2001-08-15  
PRIOR APPLICATION NUMBER: 09/368,632  
NUMBER OF SEQ ID NOS: 41  
SOFTWARE: Patentin Ver. 2.1  
SEQ ID NO 39  
LENGTH: 16  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: IL-16 antagonist peptide  
US-09-929-922-39

Query Match  
Best Local Similarity 80.0%; Score 4; DB 4; Length 16;  
Pred. No. 97;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 REKA 5  
Db 5 REKA 8

Search completed: March 14, 2005, 10:31:12  
Job time : 25 secs

Exhibit A

QY 1 CREK 4  
1111  
DB 3 CREK 6

RESULT 6

US-09-659-786-197  
Sequence 197, Application US/09659786  
Patent No. 6491894

GENERAL INFORMATION:  
APPLICANT: Ruoslahti, Erkki  
TITLE OF INVENTION: NGR Receptor and Methods of Identifying Tumor Homing Molecules That Home to Angiogenic Vasculature Using  
TITLE OF INVENTION: Same  
FILE REFERENCE: P-LJ 3203  
CURRENT FILING DATE: 2000-09-11  
PRIOR APPLICATION NUMBER: 08/926,914  
PRIOR FILING DATE: 1997-09-10  
PRIOR APPLICATION NUMBER: 08/710,067  
NUMBER OF SEQ ID NOS: 226  
SOFTWARE: Patentin Ver. 2.0  
SEQ ID NO 197

Exhibit B

LENGTH: 9  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURES:  
OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-09-659-786-197

Query Match 80.0%; Score 4; DB 4; Length 9;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CREK 4  
1111  
DB 3 CREK 6

RESULT 7

US-08-926-914-197  
Sequence 197, Application US/08926914  
Patent No. 6576239

GENERAL INFORMATION:  
APPLICANT: Ruoslahti, Erkki  
TITLE OF INVENTION: Tumor Homing Molecules, Conjugates  
TITLE OF INVENTION: Derived therefrom, and Methods of Using Same  
NUMBER OF SEQUENCES: 199  
CORRESPONDENCE ADDRESSES:  
ADDRESSER: Campbell & Flores  
STREET: 4370 La Jolla Village Drive, Suite 700  
CITY: San Diego  
STATE: California  
COUNTRY: United States  
ZIP: 92122

COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/926,914  
FILING DATE: 10-SEP-1997  
CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:  
NAME: Campbell, Cathryn A.  
REGISTRATION NUMBER: 31,815  
REFERENCE/DOCKET NUMBER: P-LJ 2725

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (619) 535-9001  
TELEFAX: (619) 535-8949  
INFORMATION FOR SEQ ID NO: 197:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 9 amino acids  
TYPE: amino acid  
TOPOLOGY: both  
MOLECULE TYPE: peptide  
US-08-926-914-197

Query Match 80.0%; Score 4; DB 4; Length 9;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CREK 4  
1111  
DB 3 CREK 6

RESULT 8

US-08-218-025A-18  
Sequence 18, Application US/08218025A  
Patent No. 5556744

GENERAL INFORMATION:  
APPLICANT: Weiner, David B.  
APPLICANT: Ugen, Kenneth E.  
TITLE OF INVENTION: Methods and Compositions for Diagnosing and Treating Certain HIV Infected Patients  
NUMBER OF SEQUENCES: 197  
CORRESPONDENCE ADDRESSES:  
ADDRESSER: Howson and Howson  
STREET: P.O. Box 457, 321 No. 55567441strow Road  
CITY: Spring House  
STATE: Pennsylvania  
COUNTRY: U.S.A.  
ZIP: 19477

COMPUTER READABLE FORM:  
MEDIUM TYPE: floppy disk  
OPERATING SYSTEM: IBM PC compatible  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/218,025A  
FILING DATE: 24-MAR-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/891,451  
FILING DATE: 29-MAY-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Bak, Mary E.  
REGISTRATION NUMBER: 31,215  
REFERENCE/DOCKET NUMBER: WST33A  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (215) 540-9206  
TELEFAX: (215) 540-5818  
INFORMATION FOR SEQ ID NO: 18:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 amino acids  
TYPE: amino acid  
TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
US-08-218-025A-18

Query Match 80.0%; Score 4; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred. No. 87;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 REKA 5  
1111  
DB 11 REKA 14